ATMOSPHERIC ELECTRICITY.

- (1.) Thunder and Lightning.—The diminution in frequency of thunder and lightning storms during the latter part of the month has been very notable. The days of most numerous local storms, covering the greatest extent of territory, appear to have been 5th, 8th, 11th, 12th, 17th, 18th and 26th. By far the greater number of these storms have occurred in the South Atlantic States, Mississippi valley and the Southwest, and a much smaller number in the Ohio valley, Lower Lakes, Middle and Eastern States.
- (2.) Auroras.—The auroral displays during September have generally been faint, although not less numerous than usual. They have been noted on the 3d, 4th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 15th, 17th, 21st, 23d, 26th, 27th and 30th, and, as in previous months, the general relationship between auroras and thunder-storms has been well marked. The only auroras reported from more than one station were those of the 7th, seen in Maine, New York, Wisconsin and Dakota. The 8th, seen in Dakota, Iowa and Michigan. The 11th, seen in Maine, Wisconsin, Dakota and Iowa. The 12th, seen in Maine, New Hampshire, Vermont, Massachusetts, New York, Michigan, Ohio, Indiana, Tennessee and Dakota, and the 13th, seen in Massachusetts and Michigan.

OPTICAL PHENOMENA.

- (1.) Solar Halos.—Solar Halos have been observed principally during the latter portion of the month. Those that are reported by more than one observer, are as follows: On the 6th, in New Hampshire, New York and Pennsylvania. On the 21st, in Ohio and Vermont. On the 23d, in Kansas and North Carolina. On the 24th, in Massachusetts, New Jersey, Virginia, North Carolina, Tennessee, Ohio, Indiana and Illinois.
- (2.) Lunar Halos.—Lunar halos have also been observed principally during the latter portion of the month, and as usual appear over nearly the same regions in which Solar halos are observed, the former are, however, much more fully reported. The halos recorded by two or more observers are as follows: 11th, in Vermont and Indiana; 19th, in Indiana, Illinois and Iowa; 21st, in Massachusetts, New York, New Jersey and Ohio; 22nd, in Louisiana, Indiana and Pennsylvania; 23d, in Pennsylvania, Indiana, Illinois, Iowa, Kansas, North Carolina and Texas; 24th, in Vermont, Pennsylvania, North Carolina, Alabama, Ohio, Illinois, Michigan, Iowa, Missouri and Nebraska; 25th, in Vermont, Tennessee, Ohio and Michigan; 26th, in New York, North Carolina, Georgia and Illinois; 28th, in Vermont, New York and Mississippi.

MISCELLANEOUS PHENOMENA.

(1.) Forest and Prairie Fires.—The general dryness of the country has materially contributed to the prevalence of forest fires during the first half of the month. These have been reported as extensive in New Jersey from the 12th to the 15th, and in Upper Canada from the 10th to the 16th. The resulting wide-spread smoke and haze was noted on the following dates: On the 1st, 2d and 3d in Maine, Massachusetts, New York, New Jersey, Virginia and Ohio; from the 10th to 15th inclusive, in Maine, Massachusetts, New York, New Jersey, Virginia, Pennsylvania, Ohio and Illinois.

- (2.) Migration of Birds.—The northward flight of wild geese was observed on the 6th in Colorado; 12th and 22d in Iowa; 27th in Kansas. That of wild pigeons was observed on the 28th in Kentucky.
- (3.) Unusually Light Meteors were observed on the 1st, 2d, 3d, 4th, 5th, 6th, 8th, 10th, 14th, 15th, 21st, 23d, 27th, 29th and 30th. Of these, those of the 1st, 4th, 6th, 10th, 14th and 27th were not reported from two or more stations.

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Brig. Gen. (Bvt. Assg.,) Chief Signal Officer, U. S. A.

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